

**ABSTRACT**

Briefly, in accordance with one embodiment of the invention, a method of interleaving a data stream may occur as follows. A sequence of groupings of bits or binary digital signals from a data stream, the groupings have a predetermined size, are written from a data bus into a memory. Selective groupings stored in the memory are applied to a first multiplexer (MUX). Groupings applied to the first MUX are then applied to a second MUX. At least one grouping, applied to a third MUX, is applied to the second MUX between applying groupings from the first MUX to the second MUX.

Briefly, in accordance with another embodiment of the invention, an integrated circuit includes: a memory, a plurality of multiplexers, and a state machine. The memory, multiplexers and state machine are coupled so that selected groupings of bits from the received bit stream are capable of being extracted to produce another bit stream different from the received bit stream.

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